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(54) **An epicyclic transmission assembly having a pair of planetary gear sets.**

(57) The present invention is directed to a five-speed, epicyclic transmission assembly (10) having a compound planetary gear set encased in a common housing (36). Each planetary gear set (34,46) has a sun gear (32,44) and a ring gear (56,50). A plurality of pinion gears (48,52,54) are operatively supported from a common carrier (40). The sun gears and ring gears of the two planetary gear sets are compounded by the operation of the pinion gears presented from the common carrier. Six, torque transfer devices (26) are utilized. At least two of the torque transfer devices are input clutch members (28) which selectively connect the input means (14) to predetermined components of the planetary gear sets, and at least two of the torque transfer devices are reaction brake members (38) that selectively ground predetermined components of the planetary gear sets to the housing. The sun gear (44) in one of said planetary gear sets may be operatively connected to at least one of the input clutch members. The sun gear (32) in the other planetary gear set is operatively connected to at least one of the input clutch members as well as to one of said reaction brake members. The carrier is operatively connected to one of the clutch members and one of said reaction brake members, and the ring gear (50) in one of said planetary gear sets is connected to the

output shaft (18).

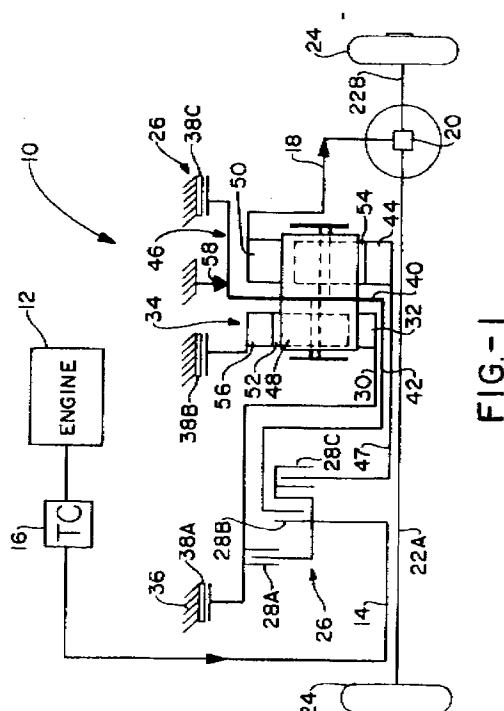


FIG. 1

EP 0 479 347 A3



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EUROPEAN SEARCH REPORT

Application Number

EP 91 20 2229

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	EP-A-0 385 345 (NISSAN) * abstract; figures 7,17 * ---	1,2,5-7	F16H3/66
X	DE-A-3 822 319 (ZAHNRADFABRIK FRIEDRICHSHAFEN) * abstract; figure 5 *	1,2,5,6	
Y	---	7	
Y	US-A-2 862 403 (MILLER) * figure 1 * -----	7	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F16H B60K
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 15 JANUARY 1993	Examiner GERTIG I.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	